Fig.1

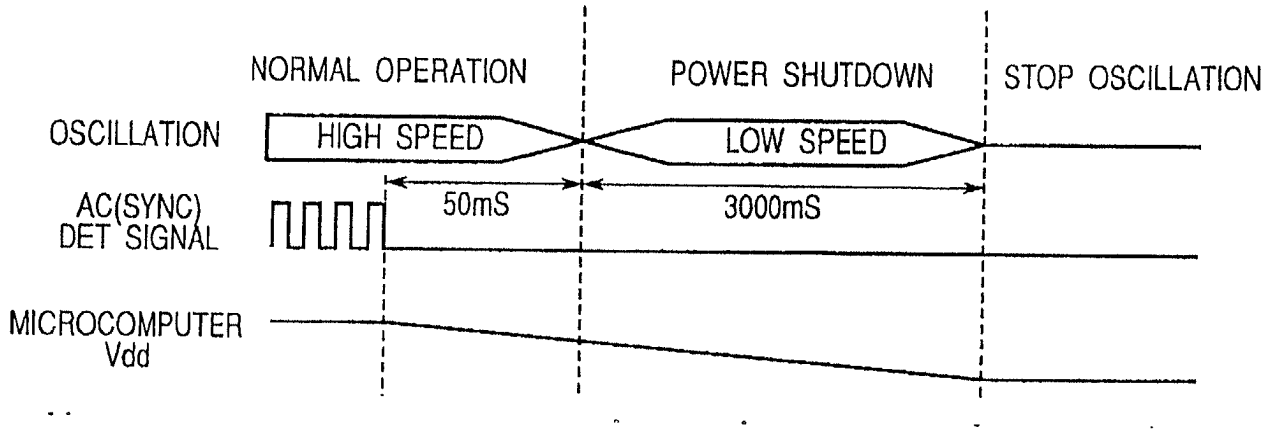
NORMAL OPERATION
POWER SHUTDOWN
STOP OSCILLATION
OSCILLATION
HIGH SPEED
LOW SPEED
AC(SYNC)
DET SIGNAL
50mS
3000mS
MICROCOMPUTER
Vdd

Fig.2

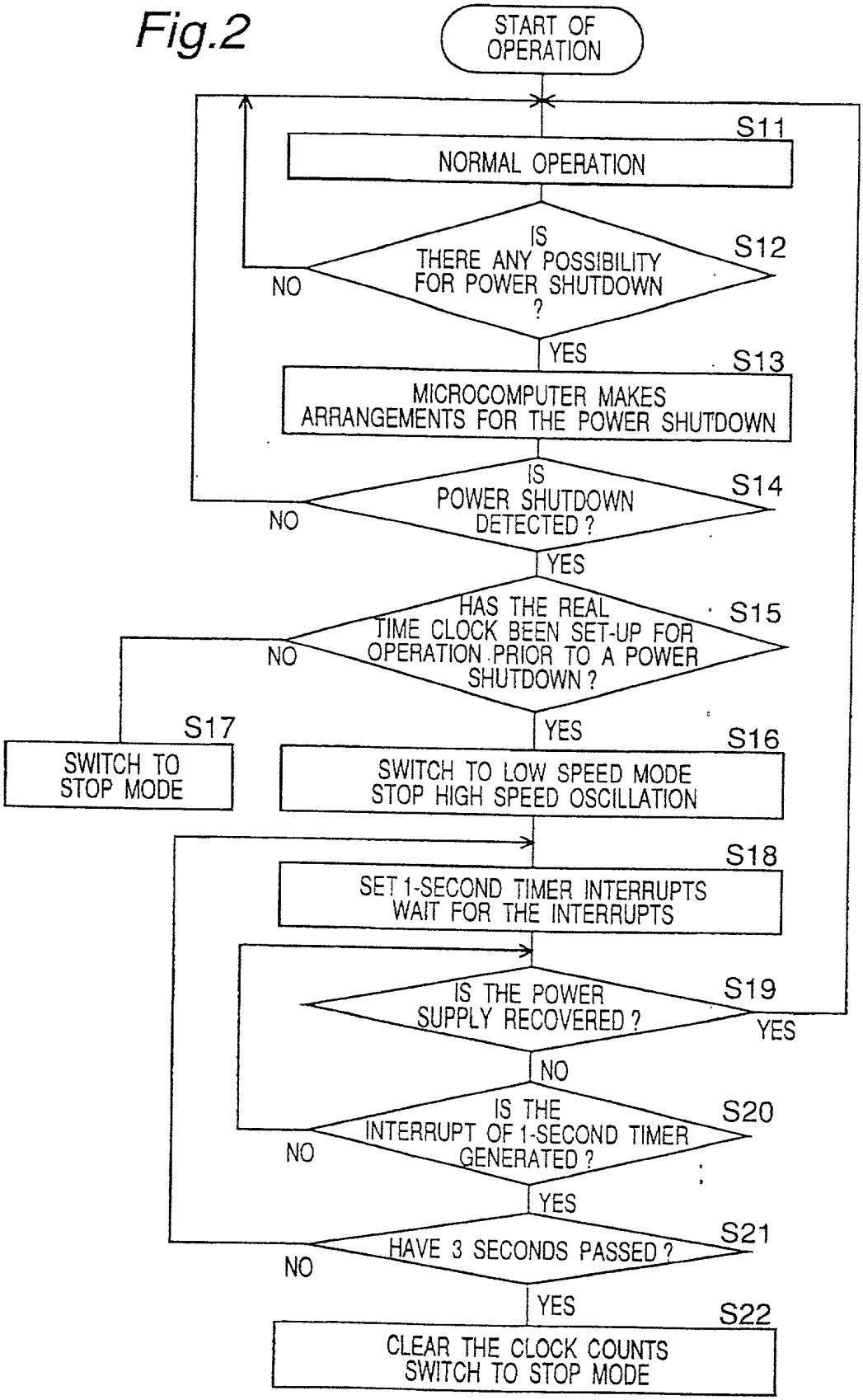
START OF OPERATION
S11
NORMAL OPERATION
IS THERE ANY POSSIBILITY FOR POWER SHUTDOWN ?
S12
NO
YES
S13
MICROCOMPUTER MAKES ARRANGEMENTS FOR THE POWER SHUTDOWN
IS POWER SHUTDOWN DETECTED ?
S14
NO
YES
HAS THE REAL TIME CLOCK BEEN SET-UP FOR OPERATION PRIOR TO A POWER SHUTDOWN ?
S15
NO
YES
S17
SWITCH TO STOP MODE
S16
SWITCH TO LOW SPEED MODE STOP HIGH SPEED OSCILLATION
S18
SET 1-SECOND TIMER INTERRUPTS WAIT FOR THE INTERRUPTS
IS THE POWER SUPPLY RECOVERED ?
S19
YES
NO
IS THE INTERRUPT OF 1-SECOND TIMER GENERATED ?
S20
NO
YES
HAVE 3 SECONDS PASSED ?
S21
NO
YES
S22
CLEAR THE CLOCK COUNTS SWITCH TO STOP MODE

Fig.3

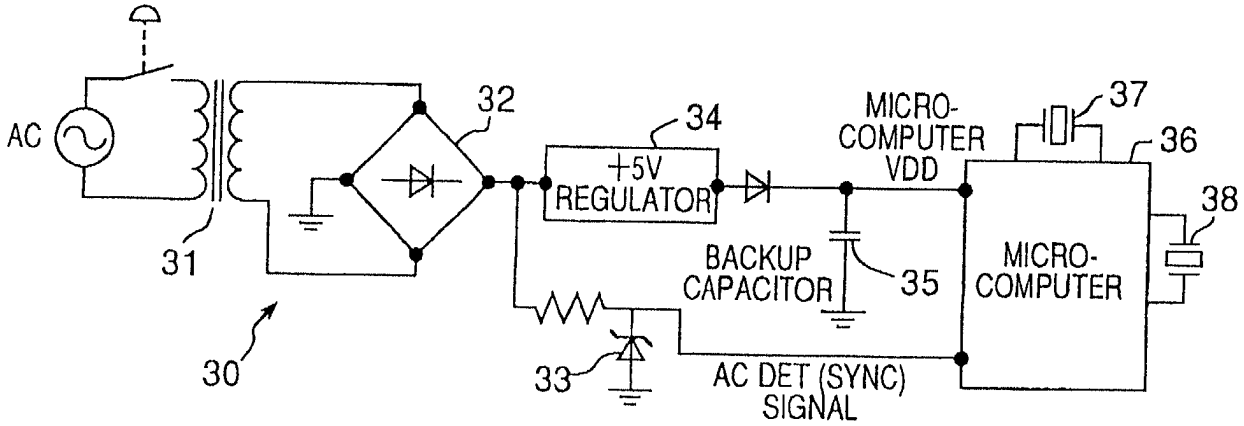
AC
31
32
34
+5V
REGULATOR
MICRO-
COMPUTER
VDD
37
36
38
BACKUP
CAPACITOR
35
MICRO-
COMPUTER
30
33
AC DET (SYNC)
SIGNAL

Fig.4